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Conformation of benzylidenecyclohexanone, dibenzylidenecyclohexanone, and benzylidenecyclohexanone oxide

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Abstract

1. The conformations of 2-benzylidenecyclohexanone, its 2-p-halo-derivatives, and pulegone were investigated by the method of dipole moments (DM). These compounds have a half-chair conformation, while the phenyl radical in the benzylidene derivatives occupies a trans-position relative to the carbonyl group. 2. For 2,6-dibenzylidenecyclohexanone and its 2,6-di-p-halo-derivatives, an envelope-type conformation was demonstrated, according to the data of DM and IR spectroscopy. 3. For benzylidenecyclohexanone oxide, a chair conformation with an axial oxygen atom of the epoxy group is preferential. © 1969 Consultants Bureau.

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